

REMARKS/ARGUMENTS

The Office Action mailed May 23, 2008 has been received and the Examiner's comments carefully reviewed. The Office Action rejected claims 1-64. Claims 1, 13, 19, 21, 28, 34, 40, 50 and 51 have been amended. No new matter has been added. For at least the following reasons, Applicants respectfully submit that the presently pending claims are in condition for allowance.

Claim Objections

Claims 28-39 were objected to because of informalities. Applicants have amended the claims to address the objection and respectfully request the objection be withdrawn.

Claim Rejections

Claims 19-27 were rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Applicants have amended the claims to address the rejection and respectfully request the rejection be withdrawn.

Claims 51-64 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-32, 34-38 and 40-49 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,721,740 B1 to Skinner et al. in view of U.S. Pat. No. 6,263,360 B1 to Arnold et al. Claims 33 and 51 -64 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,721,740 B1 to Skinner et al. in view of U.S. Pat. No. 6,263,360 B1 to Arnold et al., as applied to claim 28 above and further in view of U.S. Pub. No.

2003/0051068 A1 to Eldridge et al. Claim 39 was rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,721,740 B1 to Skinner et al. in view of U.S. Pat. No. 6,263,360 B1 to Arnold et al., as applied to claims 1, 40 or 51 above and further in view of U.S. Pat. No. 6,941,326 B2 to Kadyk et al. Claim 50 was rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,721,740 B1 to Skinner et al. in view of U.S. Pat. No. 7,099,926 B1 to Ims et al. The Applicants respectfully disagree but have amended the claims to more clearly define the invention.

Claim 1 recites in part “establishing a notification bond associated with a particular object with the server, the notification bond enabling the client to obtain a notification from the server in response to an object related event associated with the original object; wherein the notification bond remains persistent through a reboot of the client and server and the object related event is associated with an edit of the original object; and wherein each object is associated with a different notification bond.” In contrast, Arnold does not teach notification bonds individually associated with particular objects that are persisted through a reboot.

The Office Action states that “Skinner is silent with reference to the notification bond remaining persistent through a reboot of the client and server. Arnold teaches the notification bond remaining persistent through a reboot of the client and server (‘...when lost links 210 are re-established ...’ Col. 6 Ln. 20 -43, Col. 16 Ln. 55 -67, Col. 17 Ln. 1-6).” (Office Action, page 5).

Rather than teaching notification bonds individually associated with particular objects, Arnold teaches RF links that are associated with a server and a client. Arnold states that “It should be appreciated that although links 210 may generally be any links which are suitable for

allowing server 202 to communicate with clients 206, in the described embodiment, links 210 are low-bandwidth, intermittent links. Specifically, in the described embodiment, links 210 are RF links which allow synchronous communication between server 202 and each client 206. In general, links 210 may not always be active. As previously mentioned, when a client 206 moves out of range of server 202, the associated link 210 may be lost.” (Arnold, col. 5, line 64 to col. 6, line 6).

As Arnold describes, the RF link of Arnold is simply a communication link between a client and a server, not a notification bond. This communication link is used for keeping all objects of a client synchronized with a server. ***This RF communication link is not associated with any individual object.*** Rather than teaching links that are each associated with different objects, Arnold simply describes a communication link between a server and a client that is used to synchronize all files on that client with the server.

For example, Arnold states that “server 202 is effectively aware of all objects that are associated with clients 206. Server 202 may then be able to save state information associated with each client 206. Therefore, server 202 may restore the current state of each client 206 as appropriate, e.g., when lost links 210 are re-established.” That is, the link 210 is used to synchronize all files. When the a client moves back into RF range such that the communication link 210 may be restored, Arnold teaches that this link may then be used to resynchronize all files.

The Link 210 of Arnold is not notification bond that is associated a particular object. Arnold does not teach notification bonds that are associated with a particular object. Arnold

does not teach notification bonds that are each associated with a different object. As Arnold does not teach notification bonds, Arnold cannot teach notification bonds that are persisted through a reboot. Arnold simply teaches maintaining RF communication links between a client and a server that can be reestablished when a client comes back in RF range of a server. ***Arnold does not teach maintaining notification bonds that are individually associated with objects through a reboot.***

Since neither Arnold nor Skinner teach establishing a notification bond associated with a particular object with the server, the notification bond enabling the client to obtain a notification from the server in response to an object related event associated with the original object; wherein the notification bond remains persistent through a reboot of the client and server and the object related event is associated with an edit of the original object; and wherein each object is associated with a different notification bond, Claim 1 is proposed to be allowable. Claims 2-12 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 13 recites in part “establishing a notification bond associated with a particular object with the client, the notification bond enabling the client to obtain a notification from the server in response to an object related event associated with an object; wherein the notification bond associated with a particular object remains persistent through a reboot and the object related event is associated with an edit of the original object.” For at least the reasons presented above, Claim 13 is proposed to be allowable. Claims 14-18 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 19 recites in part “a server that includes a processor and storage medium encoded with instructions to manage original objects, the server including a bond manager configured to issue notification bonds to clients, each notification bond being associated with a particular original object and enabling a client to obtain a notification from the server in response to an object related event associated with an the particular original object in which the notification bond is associated; wherein the notification bond associated with the particular object s remains persistent through a reboot and the object related event is associated with an edit of the original object.” For at least the reasons presented above, Claim 19 is proposed to be allowable. Claims 20-27 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 28 recites in part “a second data field containing entries, each entry being indexed to an object identifier in the first indexing data field and containing states associated with a notification bond associated with a particular object between the server and a client that caches the object identified by the object identifier; wherein the first indexing data field and the second data field are created by the server and wherein the server accesses the first indexing data field and the second data field to determine what objects on the client require notification in response to an object related edit event and wherein the notification bond associated with the particular object remains persistent through a reboot.” For at least the reasons presented above, Claim 28 is proposed to be allowable. Claims 29-33 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 34 recites in part “a second data field containing entries, each entry being indexed to a server identifier in the first indexing data field and containing states

associated with a notification bond associated with a particular object between the client and a server identified by the server identifier, the notification bond being associated with a cached object created by the client from an original object; wherein the first indexing data field and the second data field are accessed by a computing device and wherein the computing device uses the first indexing data field and the second data field in updating objects in response to an object related edit event and wherein the notification bond associated with the particular object remains persistent through a reboot.” For at least the reasons presented above, Claim 34 is proposed to be allowable. Claims 35-39 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 40 recites in part “means for establishing a notification bond associated with a particular original object with the server and the client, the notification bond enabling the client to obtain a notification from the server in response to an object related event associated with the particular original object in which the notification bond is associated; wherein the notification bond remains persistent through a reboot and the object related event is associated with an edit of the original object.” For at least the reasons presented above, Claim 40 is proposed to be allowable. Claims 41-49 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 50 recites in part “establishing a plurality of notification bonds, each associated with a particular one of the cached objects, between the server and the computer, the notification bonds enabling the client to obtain a notification from the server in response to an object related event associated with the original object in which the notification bond is

associated; wherein the plurality of notification bonds between the server and the computer that are associated with one of the cached objects each remain persistent through a reboot of the client and server and the object related event is associated with an edit of the original object; and wherein each object includes is associated with a different one of the plurality of notification bonds.” For at least the reasons presented above, Claim 50 is proposed to be allowable. For example, Arnold teaches a single RF link between a computer and a server. Arnold does not teach *a plurality of notification bonds between the server and the computer that are associated with one of the cached objects each remain persistent through a reboot of the client and server*. As Arnold teaches only a singly RF link between a computer and a server, Arnold does not teach multiple links between the same computer and server. Accordingly, *Arnold does not teach maintaining a plurality of different RF links between the same computer and server after a reboot*.

As amended, Claim 51 recites in part “establishing a notification bond associated with one of the original objects with the server for each of the cached objects, the notification bond enabling the client to obtain a notification from the server in response to an edit associated with the original object; wherein the notification bond associated with the original objects remains persistent through a reboot of the client and server and the edit is associated with a modification of the original object; wherein each object includes a notification bond; and wherein the edit to the object is one of an edit to a word processing document, an edit to a spreadsheet document; or an edit to an image file.” For at least the reasons presented above, Claim 51 is proposed to be allowable. Claims 52-64 are proposed to be allowable as they depend from a valid base claim.

Conclusion

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicants at the telephone number provided below.

Respectfully submitted,

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